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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,810	07/28/2003	Stephen A. Tarin	8676-042	7914
20583	7590	10/16/2006	EXAMINER	
JONES DAY 222 EAST 41ST ST NEW YORK, NY 10017			DWIVEDI, MAHESH H	
			ART UNIT	PAPER NUMBER
			2168	

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/629,810	Applicant(s) TARIN, STEPHEN A.	
	Examiner Mahesh H. Dwivedi	Art Unit 2168	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION:

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 August 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 25-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/2/2006</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Receipt of Applicant's Amendment, filed on 08/02/06, is acknowledged. The amendment includes the addition of claims 26-31.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 08/02/2006 has been received, entered into the record, and considered. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.
3. The information disclosure statement filed 07/28/2003 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

The examiner notes that the references for the 07/28/2003 information disclosure statement cannot be located from application 09/412/158. The examiner requests that applicant submit a copy of each non-patent literature citing (C1-C29)

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent

granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 25 is rejected under 35 U.S.C. 102(e) as being anticipated by **Mehta** ("Mehta" (U.S. Patent 5,999,933)).

6. Regarding claim 25, **Mehta** teaches a method comprising:

- a. retrieving information regarding the number of occurrences of a given value (Column 14, lines 4-17);
- b. determining an instance element based on information regarding the number of occurrences of the given value (Column 14, lines 4-17);
- c. determining a connectivity element based on the instance element (Column 20, lines 28-57); and
- d. determining a record from the connectivity element (Column 21, lines 5-21).

Regarding claim 26, **Mehta** further teaches a method comprising:

- A) wherein the step of retrieving the information regarding the number of occurrences of the given value comprises analyzing the cardinality store (Column 14, lines 4-17).

Regarding claim 27, **Mehta** further teaches a method comprising:

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A) wherein the step of determining an instance element information regarding the number of occurrences of the given value comprises analyzing the instance store (Column 14, lines 4-17).

Regarding claim 28, **Mehta** further teaches a method comprising:

A) wherein the step of determining the connectivity element comprises analyzing a connectivity store (Column 20, lines 28-57).

Regarding claim 29, **Mehta** further teaches a method comprising:

A) wherein the step of determining a record comprises analyzing a value store (Column 21, lines 5-21).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. Claims 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Mehta** (U.S. Patent 5,999,933) as applied to claims 25-29 and in view of **White et al.** (U.S. Patent 5,918,225).

9. Regarding claim 30, **Mehta** does not explicitly teach a method comprising:  
A) wherein the retrieving of the record is caused by an Structured Query Language (SQL) query.

**White**, however, teaches “wherein the retrieving of the record is caused by an Structured Query Language (SQL) query” as “Clients store data in and retrieve data from one or more database tables resident on the Server by submitting SQL commands” (Abstract)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **White's** would have allowed **Mehta's** to provide a method for improved performance in data retrieval for relational databases via SQL, as noted by **White** (Column 3, lines 1-7).

Regarding claim 31, **Mehta** does not explicitly teach a method comprising:  
A) wherein the SQL query is a SELECT query.

**White**, however, teaches “wherein the SQL query is a SELECT query” Here, “projecting” data refers to the project part of an SQL SELECT statement” (Column 48, lines 42-43)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **White's** would have allowed **Mehta's** to provide a method for improved performance in data retrieval for relational databases via SQL, as noted by **White** (Column 3, lines 1-7).

***Response to Arguments***

10. Applicant's arguments filed on 08/02/06 have been fully considered but they are not persuasive. Applicant suggests on pages 5-6, that **"Mehta discloses (1) a standard database management system (with a database)...There is no disclosure in Mehta that either of these two distinct items is a compressed database"**. However, the examiner wishes to point to Column 19 and refer to the second paragraph, which states that **"in step 446, copies of the template library 152' and the database 150' (containing the extraction able 151') are shipped to the client 118 using the compress/decompression utility"** (Column 19, lines 14-17). The examiner wishes to state that the database in **Mehta** is clearly compressed when sent to the client.

Applicant then goes on to argue on page 6, that **"By contrast, Mehta relates neither to the structure nor to any compression of a database"**. However, the examiner wishes to point to Column 19 and refer to the second paragraph, which states that **"in step 446, copies of the template library 152' and the database 150' (containing the extraction able 151') are shipped to the client 118 using the compress/decompression utility"** (Column 19, lines 14-17). The examiner wishes to state that the database in **Mehta** is clearly compressed when sent to the client.

Applicant then goes on to argue on page 6, that **“Mehta does not disclose “retrieving information regarding the number of occurrences of a given element, recited in step (a) of claim 25, at least because Mehta does not disclose compressing a database by storing information regarding the number of occurrences”**. However, the examiner wishes to point to Column 19 and refer to the second paragraph, which states that **“in step 446, copies of the template library 152’ and the database 150’ (containing the extraction able 151’) are shipped to the client 118 using the compress/decompression utility”** (Column 19, lines 14-17). The examiner wishes to state that the database in **Mehta** is clearly compressed when sent to the client. The examiner further wishes to point to column 14, and refer to the second paragraph which states **“Fetch logic seven is for determining the number of instances of data structures of a selected type from the number of instances of a referenced data structure”** (Column 14, lines 5-7). The examiner further wishes to state that **Mehta** clearly acquires the information as to the number of instances of an element.

Applicant then goes on to argue on page 6, that **“The Office Action’s reliance on Mehta for disclosing “determining an instance element” is incorrect, at least because the cited portion of Mehta’s specification a col. 14, lines 4-17 discloses “determining the number of instance,” but not “an instance element” as recited in the claim”**. However, the examiner wishes to state that according to the specification of the instant application, **“instant information identifies the instances of each value in the field that is in a record”** (Page 4, lines 1-6). The examiner wishes to state that



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**Mehta's** method clearly teaches identifying the number of instances of data structures (Column 14, lines 4-17):

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 5,546,575 issued to **Potter et al.** on 13 August 1996. The subject matter disclosed therein is pertinent to that of claim 25 (e.g., methods to query compressed databases).

U.S. Patent 5,592,667 issued to **Bugajski** on 07 January 1997. The subject matter disclosed therein is pertinent to that of claim 25 (e.g., methods to query compressed databases).

U.S. Patent 5,946,692 issued to **Faloutsos et al.** on 31 August 1999. The subject matter disclosed therein is pertinent to that of claims 25 (e.g., methods to query compressed databases).

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Contact Information***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mahesh Dwivedi whose telephone number is (571) 272-2731. The examiner can normally be reached on Monday to Friday 8:20 am – 4:40 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo can be reached (571) 272-3642. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mahesh Dwivedi

Patent Examiner


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October 13, 2006

Leslie Wong 

Primary Examiner



**TIM VO**  
**SUPERVISORY PATENT EXAMINER**  
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